

REMARKS

The Office Action mailed June 17, 2003 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-18 were pending in the application. Claims 7, 8, and 12 have been amended, no claims have been cancelled and new claims 19 and 20 are newly added. Therefore, claims 1-20 are pending in the application with claims 5, 6, 9, and 10 being withdrawn from consideration.

Applicants thank the examiner for indicating that claims 12-16 are allowed and that claims 7 and 8 contain allowable subject matter. Accordingly, applicants have placed claims 7 and 8 in independent form including all the limitations of their base claim. Therefore, claims 7 and 8 are now also in condition for allowance in accordance with the indication in the Office Action.

With respect to the objection to claims 12 and 17, applicants believe that these claims are unobjectionable. The use of multiple colons is believed to be in accordance with U.S. patent practice and the elements associated with the second and subsequent colons have been indented in order to make the associations with each colon clear. The examiner is requested to contact the undersigned attorney to resolve this issue if the examiner is to maintain this objection.

FIGS. 1, 2, 7-9, and 12 have been amended to better conform these figures to U.S. practice. Six formal drawing Replacement Sheets for these figures are attached hereto.

The specification has also been amended to be consistent with the amendments to the drawings and to correct a spelling error. No new matter has been added.

This amendment changes and adds claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

In the Office Action, claims 1, 4, and 11 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent 6,308,672 to Lichti et al. (hereafter "Lichti"). Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lichti, in view of legal precedence. Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 5,736,633 to Magner (hereafter "Magner") in view of Lichti. Claim 18 is rejected

under 35 U.S.C. § 103(a) as being unpatentable over Magner in view Lichti as applied to claim 17 above, and further in view of legal precedence. Applicants respectfully traverse these rejections, insofar as they are applicable to the presently pending claims, for at least the following reasons.

With respect to independent claim 1, applicants submit that the protrusion shaft cited in the Office Action in Lichti (as not numbered but clearly visible) does not correspond to the protrusion shaft (28) recited in claim 1. Please note that the reference numerals in the current specification are provided herein to facilitate understanding of the claimed invention and are not intended to limit the claims in any way. Please see the enclosed marked-up Fig. 3 of Lichti attached herein as Attachment A in which the hand-written “protrusion shaft OA Page 3 Line 5th to the last,” appears to be cited as corresponding to the claimed protrusion shaft since the claimed target plate is formed as being substantially flat. However, in Lichti, the target plate (46) is not fitted to the alleged protrusion shaft (not numbered). Instead, the cited protrusion shaft and the flat target plate (46) are monolithic, i.e., they are the same member, and therefore cannot be described as different elements such that the target plate is fitted to the protrusion shaft as recited in claim 1. That is, in the claimed invention, the target plate (155) and the protrusion shaft (28) are different members as depicted with different patterns, for example, in Fig. 7. Accordingly, independent claim 1 is believed to patentable over the applied prior art.

Similarly, independent claim 17 recites that the substantially flat target plate is fixed to the protrusion shaft. As discussed above, such an arrangement is not disclosed by Lichti since Lichti’s target wheel/plate 46 and “protrusion shaft” (not numbered but cited by examiner as marked in Attachment A) is formed as an integral element rather than a separate substantially flat target plate fixed to the protrusion shaft as required by claim 17. Since this deficiency in Lichti is not cured by Maurer, claim 17 is also believed to be patentable over the applied prior art.

With respect to dependent claim 4, the office action asserts that the external periphery of the target plate (46) is thinner than the internal periphery. This assertion appears to be incorrect since this relationship is not disclosed or suggested by either the text or figures of

Lichti. Accordingly, this recited feature provides an additional reason for the patentability of this claim.

With respect to dependent claims 2-3, applicants submit the target wheel/plate (46) in Fig. 3 of Lichti is not press fitted to what the Office Action asserts as the claimed protrusion shaft (not numbered) as has been discussed earlier herein. Accordingly, the features recited in these claims are also not disclosed or suggested by the applied prior art.

The dependent claims are also in condition for allowance for at least the same reasons, as discussed above, as the independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole. For example, claims 2-4 and newly added claims 19 and 20 recite additional features (as discussed above) that are not disclosed or suggested by the applied prior art and these features provide additional reasons for the patentability of these claims.

In view of the foregoing amendments and remarks, applicants respectfully request entry and consideration of the instant amendment and reply because it is believed to place the application in condition for allowance. If there are any questions regarding the application, or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is invited to contact the undersigned attorney at the local telephone number below.

Respectfully submitted,

Date September 12, 2003

By Aaron C. Chatterjee

FOLEY & LARDNER
Customer Number: 22428



22428

PATENT TRADEMARK OFFICE

Telephone: (202) 945-6162

Facsimile: (202) 672-5399

Pavan K. Agarwal
Attorney for Applicant
Registration No. 40,888

Aaron C. Chatterjee
Registration No. 41,398

Attached: Attachment A
Six (6) Replacement Sheets for FIGS. 1, 2, 7-9, and 12

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicants hereby petition for any needed extension of time.

U.S. Patent

Oct. 30, 2001

Sheet 3 of 5

US 6,308,672 B1

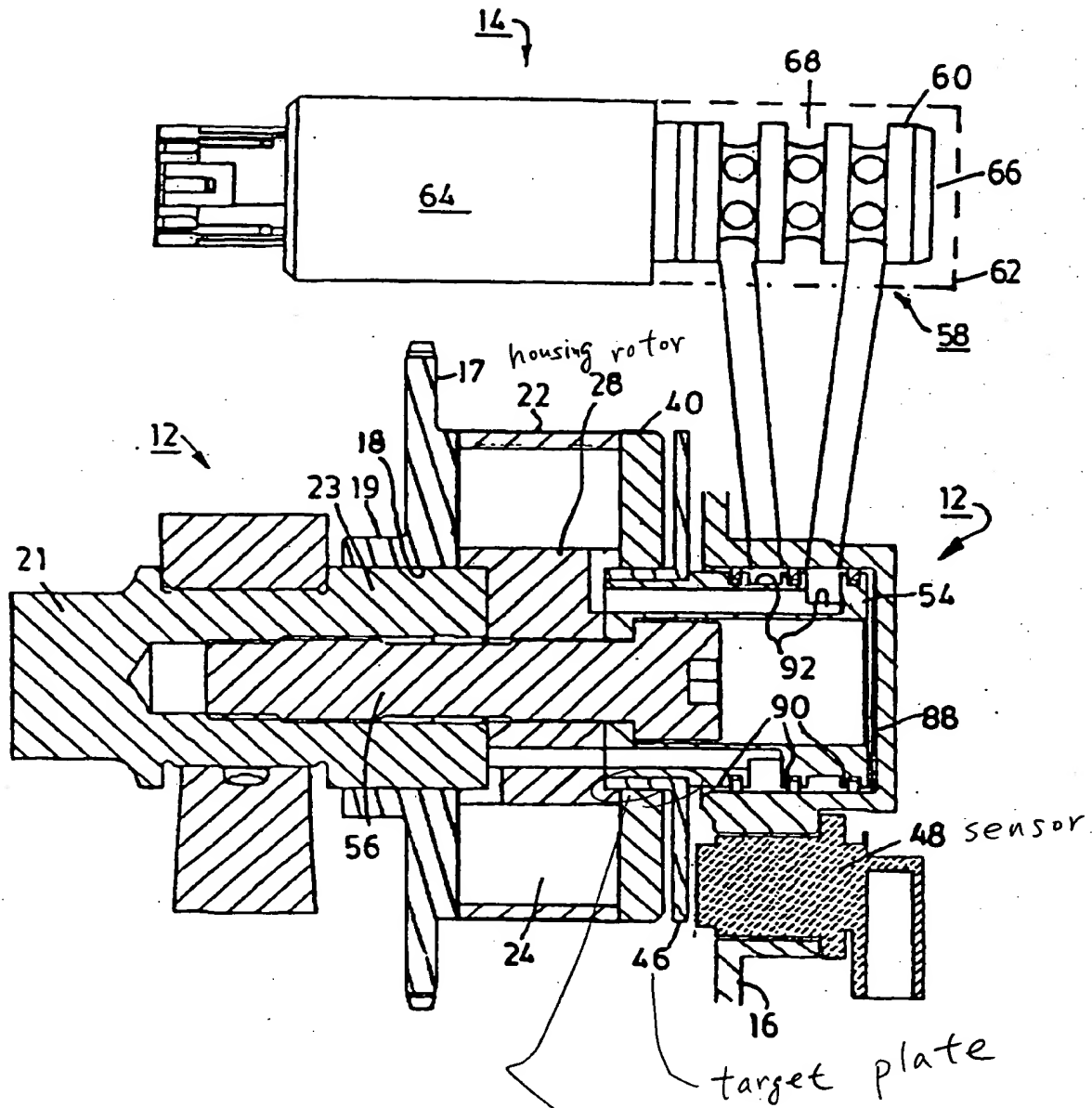


FIG. 3

protrusion shaft

OA Page 3 Line 5th to the last